**Science Vocabulary**

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| **Science Vocabulary** | | | | | | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **EYFS/**  **Year 1** | **Materials**  Names of **materials**: wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.  Properties of materials: **hard, soft, shiny, dull, stretchy**, **rough**, **smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof**, **absorbent, not absorbent,** sharp, stiff.  Other: **object** | **Seasonal Change**  **Seasons**: **spring, summer, autumn, winter**, seasonal change.  **Weather**: e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.  Measuring weather: temperature, rainfall, wind direction, thermometer, rain gauge.  Day length: night, day, **daylight.** | **The Animal Kingdom**  Names of animal groups: **fish, amphibians, reptiles, birds, mammals.**  Animal diets: **carnivore, herbivore, omnivore.**  Human and animal body parts: e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.  Human senses: **sight, hearing, touch, smell, taste.**  Exploring senses: loud, quiet, soft, rough.  Other: human, animal, pet. | **Seasonal Change**  **Seasons**: **spring, summer, autumn, winter**, seasonal change.  **Weather**: e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.  Measuring weather: temperature, rainfall, wind direction, thermometer, rain gauge.  Day length: night, day, **daylight.** | **Plants**  Names of common plants: **wild plant, garden plant, evergreen** tree, **deciduous** tree, common flowering plant, **weed,** grass.  Name some features of plants: e.g. **flower**, vegetable, **fruit**, berry, **leaf/leaves**, blossom, **petal**, **stem**, trunk, branch, **root**, **seed, bulb,** soil.  Name some common types of plant e.g. sunflower, daffodil. | **Seasonal Change**  **Seasons**: **spring, summer, autumn, winter**, seasonal change.  **Weather**: e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.  Measuring weather: temperature, rainfall, wind direction, thermometer, rain gauge.  Day length: night, day, **daylight.** |
| **Year 2** | **Materials**  Changing shape: squash, bend, twist, stretch  **Properties** of **materials:** e.g.strong, flexible, light, hard-wearing, elastic, rigid, malleable  Other: **suitability**, force | **Working like a Scientist – forces**  Forces: **force**, move, **push, pull, friction**, gravity, surface  Plus previously introduced vocabulary: names of materials and their properties  Working scientifically vocabulary that you may come across:  Aim, answers, block diagrams, changes, compare, describe, enquiry, equipment, experience, explore, findings, gather, group, identify , name, investigate, measure, notice, observe, patterns, questions, Record, same, similarity, simple tables, sort, sorting diagrams, tally charts, test  What will we do? (plan), What do you think will happen? (prediction), What happened? (results), What have we found out? (conclusion) | **Living things**  Living or dead**: living, dead, never living,** not living, alive, never been alive, healthy.  **Life processes:** movement, sensitivity, growth, reproduction, nutrition, excretion, respiration.  **Food chains: food sources,** food, predator, prey. | **Animals, including humans**  Being born and growing: **Young, offspring, live young**, grow, **develop**, change, hatch, lay, fly, crawl, talk.  Young and adult names: e.g. lamb and sheep, kitten and cat, duckling and duck.  **Life cycle** stages: e.g. baby, toddler, child, teenager, **adult;** frogspawn, tadpole, froglet, frog.  Survival and staying healthy: basic needs, survive, food, air, **exercise, diet,** **nutrition**, healthy, balanced diet, **hygiene, germs.**  Food groups: fruit and vegetables, proteins, dairy and alternatives, carbohydrates, oil and spreads, fat, salt, sugar.  Previously introduced vocabulary: **water**. | **Plants**  Growth of plants: **germination**, **shoot, seed dispersal,** grow, food store, life cycle, die, wilt, seedling, sapling.  Needs of plants: **sunlight, nutrition,** light, healthy,space, air.  Name different types of plant: e.g. bean plant, cactus.  Names of different habitats: e.g. rainforest, desert.    Previously introduced vocabulary: **water**, **temperature**, warm, hot, cold, habitat. | **Habitats including** **microhabitats**  **Habitat, microhabitat, depend,** shelter, safety,  **survive**, suited, space, minibeast, air.  Names of habitats and microhabitats: e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.  Previously introduced vocabulary: senses, **carnivore**, **herbivore**, **omnivore**, **seed**, **water**, names of materials. |
| **Year 3** | **Light**  **Light** and seeing: **dark,** absence of light, **light source,** illuminate, visible, **shadow, translucent,** energy, block.  **Light sources:** e.g. candle, torch, fire, lantern, lightning.  **Reflective light: reflect, reflection,** surface, **ray**, scatter, reverse, beam, angle, mirror, moon.  Sun safety:dangerous, glare, damage, UV light, UV rating, sunglasses, direct.    Previously introduced vocabulary: **opaque, transparent,** sunlight, sun. | **Forces and Magnets**  How things move: move, movement, **surface**, distance, strength.  Types of **forces**:push, pull, contact force, non-contact force, **friction**.  **Magnets: magnetic, magnetic field,** magnetic force, bar magnet, horseshoe magnet, ring magnet, magnetic **poles** (north pole, south pole), **attract, repel,** compass.  Magnetic and non-magnetic materials: e.g. iron, nickel, cobalt.  Previously introduced vocabulary: metal, names of materials. | **Materials - Rocks**  Types of rock**: sedimentary rock, igneous rock, metamorphic rock.**  **Properties of rocks: permeable,** semi-permeable, **impermeable,** durable.  Names of rocks: e.g. marble, chalk, granite, sandstone, slate.  Formation of rocks and fossils: natural, human-made, **magma, lava,** molten rock, **sediment, erosion, fossilisation,** layers, bone, fossil.  Soil: sandy, chalky, clay, peaty, loamy, topsoil, subsoil, bedrock, mineral, organic matter, compost.  Other: **palaeontology.**  Previously introduced vocabulary: soil, **water**, air. | **Animals and Skeletons**  Food groups and **nutrients**: fibre, fats **(saturated and unsaturated**), vitamins, minerals.  Skeletons and muscles: skeleton, **muscles, tendons, joints,** protection, support, organs, voluntary muscles, involuntary muscles, biceps, triceps, contract, relax, bone, cartilage, shell, **vertebrate, invertebrate,** endoskeleton, exoskeleton, hydrostatic skeleton.  Names of human bones: e.g. skull, spine, backbone, vertebral column, ribcage, pelvis, clavicle, scapula, humerus, ulna, pelvis, radius, femur, tibia, fibula.  Other: **energy**.    Previously introduced vocabulary: movement. | **Plants**  Water transportation: transport, **evaporation, evaporate, nutrients,** absorb, anchor.  Life cycle of flowering plants: **pollination** (insect/wind), pollen, nectar, pollinator, seed formation, **seed dispersal** (animal/wind/water), reproduce, **fertilisation,** fertilise, **stamen,** anther, filament, **carpel (pistil),** stigma, style, ovary, ovule, **sepal**, carbon dioxide.    Previously introduced vocabulary: life cycle**.** | **Investigative skills**  Accurate, bar chart, chart, classify, comparative test, conclusion (What have we found out?) , criteria, data, develop, diagram, evaluate , evidence, explanation , key , making a test fair, method, observations, plan (What will we do?) , practical enquiry, prediction (What do you think will happen?)  primary sources, questioning, reasoning, relationships, results (What happened?), secondary sources, standard units, table, What do we change, what do we keep the same, what are we measuring? |
| **Year 4** | **States of matter**  **States of matter: solids, liquids, gases,** particles.  State change: **evaporate,** **condense,** **melt, freeze**, heat, cool, melting point, freezing point, boiling point, **water vapour**.  Water cycle: **precipitation**, evaporation, condensation, ground run-off, collection, underground water, bodies of water (sea, river, stream), water droplets, hail.  Other: atmosphere.    Previously introduced vocabulary:  temperature, rain, cloud, snow, wind, sun, hot, cold, absorb, carbon dioxide. | **Electricity**  **Electricity:** mains-powered, battery-powered, **mains electricity,** plug, **appliances**, devices.  Circuits: **circuit,** simple series circuit, complete circuit, incomplete circuit.  Circuit parts: bulb, cell, wire, buzzer, switch, motor, **battery.**  Materials: **electrical conductor, electrical insulator.**  Other: safety.    Previously introduced vocabulary: names of materials. | **Sound**  Parts of the **ear**: **eardrum.**  Making sound: **vibration,** vocal cords, **particles.**  Measuring sound: **pitch**, **volume, amplitude, sound wave,** quiet, loud, high, low, travel**, distance.**  Other: **soundproof, absorb sound.** | **Digestion**  Digestive system: **digest**, digestion, tongue, teeth, saliva, salivary glands, **oesophagus, stomach,** liver, pancreas,gall bladder, **small intestine,** duodenum**, large intestine, rectum,** anus, faeces, organ.  Types of teeth and dental care: **molar**, **premolar**, **incisor**, **canine**, wisdom teeth, tooth decay, plaque, enamel, baby (milk) teeth.  Food chains and animal diets:  decomposer, food web.    Previously introduced vocabulary: **producer,** consumer**, prey, predator,** excretion**,** habitat. | **Classification**  Living things: **organisms, specimen,** species.  Grouping living things: **classification,** classification keys, classify, **characteristics**.  Names of invertebrate animals: snails and slugs, worms, spiders, insects.  Invertebrate body parts: e.g. wing case, abdomen, thorax, antenna, segments, mandible, proboscis, prolegs.  Environmental changes: **environment,** environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, **endangered species, extinct.**    Previously introduced vocabulary: carbon dioxide, **fish, bird, mammal, amphibian, reptile**, skeleton, bone, **vertebrate, invertebrate,** backbone, names for animal body parts, names of common plants, photosynthesis. | **Investigative skills**    Accurate, bar chart, chart, classify, comparative test, conclusion (What have we found out?) , criteria, data, develop, diagram, evaluate , evidence, explanation , key , making a test fair, method, observations, plan (What will we do?) , practical enquiry, prediction (What do you think will happen?)  primary sources, questioning, reasoning, relationships, results (What happened?), secondary sources, standard units, table, What do we change, what do we keep the same, what are we measuring? |
| **Year 5** | **Earth and Space**  Solar system: **star, planet.**  Names of planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus.  Shape: **spherical bodies, sphere.**  Movement: **rotate, axis,** **orbit, satellite.**  Theories: **geocentric model, heliocentric model, astronomer.**  Day length: sunrise, sunset, midday, time zone.  Previously introduced vocabulary: **Sun, moon,** **shadow**, day, night, heat, **light**, **reflect**. | **Forces**  Types of forces: **air resistance, water resistance, buoyancy, upthrust,** Earth’s **gravitational pull, gravity**,opposing forces, driving force.  **Mechanisms:** levers, pulleys, gears/cogs.  Measurements: **weight, mass,** kilograms (kg), Newtons (N), scales, speed, fast, slow.  Other: **streamlined**, Earth.  Previously introduced vocabulary:air, heat, moon. | **Mixtures & reactions**  Properties of **materials**: thermal **conductor/insulator,** magnetism, electrical resistance, **transparency**.  Mixtures and solutions: dissolving, substance, soluble, insoluble.  Changes of materials: reversible change, physical change, irreversible change, chemical change, burning, new material, product.  Separating: sieving, filtering, magnetic attraction.    Previously introduced vocabulary: electrical **conductor/insulator,** bulb, **translucent**. | **Investigative skills**  accuracy and precision, bar graphs , causal relationship, degree of trust, dependent variable, independent variable , justify, line graphs, refute, repeat results, scatter graphs  support  variables (what do we change, what do we keep the same, how and what are we measuring?) | **Living things - Life Cycles**  **Reproduction**: **asexual reproduction, sexual reproduction**, **gestation, metamorphosis,** gametes, tuber, runners/side branches, plantlet, cuttings, embryo, adolescent, penis, vagina, egg, pregnancy, gestation.    Previously introduced vocabulary: **life cycle, pollination,** offspring, **fertilise,** fertilisation, sepal, filament, anther, stamen, pollen, petal, stigma, style, ovary, carpel, ovule, stem, bulb, roots, mammal, adult, baby, sperm, cells, live young. | **Human Development**  Process of reproduction: **gestation, asexual reproduction, sexual reproduction,** sperm, egg, cells, clone.  Changes and **life cycle:** embryo, foetus, uterus, **prenatal, adolescence, puberty, menstruation, adulthood,** menopause**, life expectancy,** old age, hormones, sweat.  Changing body parts: e.g. breasts, penis, larynx, ovaries, genitalia, pubic hair.    Previously introduced vocabulary: reproduction, **reproduce,** types of animals and animal groups, **fertilisation.**  **Decay and Recycling** |
| **Year 6** | **Light**  Reflection: periscope.  Seeing light: **visible spectrum, prism.**  How light travels: light waves, wavelength, straight line, **refraction.**    Previously introduced vocabulary: names and properties of materials, absorb. | **Electricity**  Flow and measure of electricity: **voltage, amps, resistance, electrons**, volts (V), **current.**  Circuits**: symbol,** circuit diagram, component, function, filament.  Variations: dimmer, brighter, louder, quieter.  Types of electricity: natural electricity, human-made electricity, solar panels, power station.  Other: positive, negative. | **Evolution and inheritance**  **Evolution** and **inheritance:** evolve, **adaptation,** inherit, **natural selection, adaptive traits, inherited traits,** mutations, theory of evolution, ancestors, biological parent, chromosomes, genes, Charles Darwin.  Other: selective breeding, artificial selection, breed, cross breeding, genetically modified food, cloning, DNA.    Previously introduced vocabulary: classification, **offspring, characteristics, habitat, environment,** adapt, **variations**, human, **fossil,** suited, cells, names of different habitats, names of animals and their body parts, species, **sedimentary rock**, lava, **igneous rock**, **metamorphic rock**, **magma**, heat, **fossilisation**. | **Heart & lungs**  **Circulatory system**: circulation, **heart**, pulse, heartbeat, heart rate, lungs, breathing, **blood vessels**, blood, pump, transported, **oxygenated blood, deoxygenated blood,** oxygen, arteries, veins, capillaries, chambers, plasma, platelets, white blood cells, red blood cells.  Lifestyle: **drug, alcohol,** smoking, disease, calorie, energy input, energy output.  Other: water transportation, nutrient transportation, waste products.    Previously introduced vocabulary: carbon dioxide. | **Classification**  Classifying: Carl Linnaeus, Linnaean system, flowering and non-flowering plants, variation.  **Microorganisms**: **bacteria,**   single-celled, microbes, microscopic, virus, fungi, fungus, mould, antibiotic, yeast, ferment, **microscope**, decompose. | **Investigative skills & field studies**  accuracy and precision, bar graphs , causal relationship, degree of trust, dependent variable, independent variable , justify, line graphs, refute, repeat results, scatter graphs  support  variables (what do we change, what do we keep the same, how and what are we measuring?) |